



PET TURF GUIDE

What to Know Before
Installing Artificial Grass

Choosing the Right Grass

Maintenance Best Practices



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Is Artificial Grass Toxic?

Artificial grass is, well, artificial – so it's quite understandable to feel wary of switching from what is probably most familiar - natural sod.

Fortunately, artificial grass manufacturing technology and the awareness of both environmental and consumer impacts have greatly improved since turf was first introduced to the residential market – with three notable 'generations' of artificial grass developed and improved upon over the years.

For instance, when the industry was much younger, high amounts of lead were used in yarns - or grass blades - to enhance the vibrancy and longevity of their colors. At one point, some products were tested as having upwards of 5,000 parts per million of lead, 100x the current limit. However, as time has passed and the understanding of risks associated with lead exposure have expanded, the industry pivoted and consumer safety laws caught up.

Today, the Consumer Product Safety Commission (CPSC) specifies that lead content must not exceed 50 parts per million – and Purchase Green grasses are tested as having less than 1 part per million. That's virtually undetectable.

Lead test results can be made available upon request to a Purchase Green employee.

Another common topic that derives from concerns regarding toxicity is the application of crumb rubber, a type of infill that is made from recycled tires and is most often used on athletic fields and sometimes playgrounds. Crumb Rubber is known to get very hot with a pungent odor, and is currently being investigated by the CPSC for consumer risks associated with extended exposure to this type of material. For each of these reasons, Purchase Green does not sell, recommend, nor use crumb rubber for artificial grass installations.

In short, artificial grass has come a long way and poses no harm to your pets or family. We hope this has addressed any concerns you might have, but if any still remain, please call or visit your local Purchase Green store to hear more from a representative.



Does Artificial Grass Smell Bad?

In this guide, we'll discuss which infills are recommended, what grasses make a difference, and how to apply a topical solution, but for now, rest assured that **odor build-up is preventable.**

Odor build-up is arguably the most commonly expressed concern from pet owners when exploring the idea of installing artificial grass for their home, with there often being a misconception that artificial grass is not suitable for pet use and odor is inevitable. Although, good news is that while odor can sometimes develop, it is treatable as well as preventable. The key is applying the right types of products: turf, infill, and a topical cleaning solution.



Does Artificial Grass Get Hot?

When you boil down to the truth of the matter, artificial grass is made of plastic, and plastic gets warm in the sun. However, there's an important distinction to make clear, which is the difference between direct sun exposure and the ambient environment.

Artificial grass will only retain heat when directly exposed to sunlight and will not be impacted by the surrounding environment's temperature alone. This means that if turf is under shade, it will not get hot – even on the worst summer days! It's easy to demonstrate – simply leave one sample of turf in full sun exposure and another in shade, wait about five minutes, then feel the difference for yourself.

However, for those with yards that are fully exposed to the sun, there are options! Later in this guide you will learn more about Purchase Green's integrated Cool Yarn™ technology and which grasses are cooler than others.

The Product Specifications That Matter Most

When shopping for the right artificial grass for your family, much of what influences your decision is personal preference – such as color combination and the feel of the grass; and while those features are important, there will be a few product specifications that should be appropriately considered, too.

First is **pile height**: the height of the grass blades. Purchase Green grasses have a pile height range of 0.8 to 2.4 inches. A grass' pile height is significant because taller blades tend to make matted fibers from foot (paw) traffic much more noticeable. As applications with pets tend to have higher amounts of traffic on average, pet owners are usually recommended grasses with shorter pile heights, between 1.2 and 1.6 inches, to soften the appearance of traffic patterns.

Second to pile height is **density**, often a result of grasses that are manufactured with a higher stitch rate and/or a narrower gauge. Denser grasses make clean up a breeze by performing better at keeping pet waste sitting on top of the fibers, instead of sinking into the grass toward the backing material.

Then there's the **blade shape** – a much more technical specification that not all brands fully disclose. Blade shape plays an important role in the functionality and durability of the grass; its construction directly impacts how well the blade will return to its original shape after being compressed – referred to as 'blade memory' – and affects the feel and aesthetic of the finished product. Curved and angular blade shapes such as the V-shaped, W-shaped, and C-shaped fibers are high performers, whereas flat blade shapes are not as structurally supported for frequent activity. Each of Purchase Green's grass tags will have the blade shape listed; otherwise, please inquire with a Purchase Green employee about a grass' blade shape, and they would be more than happy to elaborate!



Special Purchase Green Features

A number of Purchase Green grasses have additional features that add even more value, improving both the performance and experience of the products. Most notably is Purchase Green's temperature-controlling technology called **Cool Yarn™**; grasses with this feature will generally be about **10-20% cooler** to the touch relative to similar non-treated grasses. This is also easy to demonstrate by taking one Cool Yarn™ grass sample and one non-Cool Yarn™ grass sample, leaving both in full sun exposure for 5 to 10 minutes, then feeling the difference in temperature with your hand.

Odor and bacteria build-up is also managed and considerably improved by our **antimicrobial grasses**, achieved by manufacturing the blades and backing material with silver ion additives. Silver has long been used as an antimicrobial agent, as only small amounts of it can disrupt bacteria's metabolism by preventing it from converting nutrients into energy - which then inhibits bacteria survival, reproduction, and colonization.

And lastly, products with our **Willow blade shape** are exceptionally unique, with only a small handful of manufacturers around the world producing this type of grass. Due to the manufacturing process of Willow blades, the finished look is one that appears multi-directional – in contrast to non-Willow grasses that have an obvious grain or direction to their fibers. For most customers, this achieves a much more realistic look; and Purchase Green staff love recommending grasses with Willow blades for their durability and ease of installation, as the multi-directional blades also make easy work of hiding grass seams.

Infill – the Biggest Factor in Odor Prevention

Infill, also commonly called sand, is a crucial component to every artificial grass installation—one of those corners that cannot be cut.

You need infill for four specific reasons: first, it adds weight to the installation, reducing the potential for movement over time and from ripples forming – as if the turf is carpet that needs to be stretched. Second, infill protects the backing material from UV exposure, contributing to a finished install's 15-to-25-year life expectancy. Third, appropriate amounts will add ballast, or in other words, support blade memory by helping the blades stay upright. Lastly, infill application is required in order to qualify for Purchase Green's lifetime product warranty.

Although for pet owners, it is also essential to apply the **right type of infill**, not just any infill. In most cases where there is a build-up of odor from pet waste, the primary culprit is either a lack of infill or the wrong kind. For example, landscape contractors often suggest applying Silica Sand as its easy to source and has the lowest retail cost, but what they may not know is that Silica Sand absorbs the ammonia from pet urine, creating a lasting, unpleasant aroma around the lawn. Purchase Green pet-approved infills are Herofill, Mellowfill, and Zeodorizer.



Herofill and Mellowfill are infused with Zinc, ZPT, and ZOE, inhibiting the growth of mildew and algae and significantly reducing odor caused by ammonia in urine. Zeodorizer is made of a naturally occurring non-toxic substance called Zeolite, which is also used to clean up spills in food processing facilities and complies with federal and state environmental requirements. Zeolite is a negatively charged honeycombed molecular structure that is highly attracted to liquids and gases, quickly absorbing them and neutralizing odor. Zeolite then holds onto those absorbed liquids and gases until it comes into contact with sodium ions in rain or hose water, pulling the once trapped odors and bacteria into the

ground, flushing them away into the soil. Zeodorizer is best for applications in wetter climates or those that would otherwise be regularly rinsed by irrigation or hose.

In addition to the right type of infill, the **appropriate amount** is important, too; depending on the pile height of the grass being installed, the anticipated foot traffic, or the number of dogs, the total infill amount can vary – but the general rule of thumb is about two to four pounds per square foot for pet applications. In standard applications, the goal is to apply enough infill to cover all but the top $\frac{3}{4}$ inch of the blade.

Maintenance Best Practices

While artificial turf is never truly 'maintenance free,' upkeep is still very minimal. For pet owners, regular maintenance consists of weekly or biweekly sanitization – the frequency depending on the size and/or number of dogs that are active in the area – as well as an annual 'brush-up' of the fibers to avoid traffic patterns becoming permanent.

With regard to sanitization, an enzymatic cleaning solution, such as Purchase Green's Turf Bomb, is a critical component to a pet turf maintenance regimen as it breaks down the proteins, carbohydrates, cellulose, and fats in organic waste – eliminating odors from the source. Even though infill is the principal agent for fighting against odor build up, the regular application of an enzymatic disinfectant is just as crucial for prevention – and Turf Bomb need only be applied to affected areas, rather than the entire yard.

For the best results when applying Turf Bomb, it is recommended to first brush the grass fibers with a plastic bristled rake (or Purchase Green Turf Broom) and lightly rinse the affected area with a hose to allow the solution to fully permeate the fibers and reach the backing material. Then, attach your garden hose and Turf Bomb bottle to the 'Hook and Hose' sprayer included in every purchase of a 32oz bottle, turn the dial to 'wash,' and thoroughly saturate the affected area. Let the solution sit for 15-30 minutes, then rinse again.

As for annual brush-ups, Purchase Green recommends renting a Power Broom from one of our local stores to make the task quicker and much more thorough!

